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ABSTRACT

Schools do a very poor job of preparing noncollege-bound youth to make the transition from high school to employment and adult life. A lack of formalized transition systems compounds the problems that many noncollege-bound youth encounter as they try to obtain meaningful, career-sustaining employment in primary labor markets. Various instructional alternatives can prepare students to make the transition from school to work: transitions for special populations, paid employment preparation/transition alternatives (such as apprenticeship, cooperative education, and entrepreneurship), and nonpaid employment preparation and transition alternatives (such as internships and practica, community-based volunteering, tech prep, mentoring, and simulations, shops, and labs). A synthesis of these preparation alternatives resulted in the identification of six key components that are needed for successful school-to-work transition programs: (1) coordinated, nonfragmented provision of appropriate services; (2) strong education-business partnerships resulting in paid work experiences; (3) relevance in the learning process through linkage of instruction and work; (4) early and continuing career counseling and guidance; (5) program accountability to students and community; and (6) a wide range of career/employment options available upon completion of transition services. Four desired outcomes for participants of transition programs are as follows: connecting theory with practice, developing personal and career maturity, gaining personal awareness, and attaining professional insight. (Contains 61 references.) (Author/KC)

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School-To-Work Transition: Alternatives for Educational Reform

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ABSTRACT

American education does a very poor job of preparing non-college bound youth to make the transition from high school to employment and adult life. A lack of formalized transition systems compound the problems that many non-college bound youth encounter as they try to obtain meaningful, career-sustaining employment in primary labor markets. This paper reviews the current state of the problem by examining contributing factors to and repercussions of a poor school-to-work transition system. Pedagogical alternatives for preparing students to make the transition from school to work are discussed including transition for special populations, compensated employment preparation/transition alternatives (e.g., apprenticeship, cooperative education, and entrepreneurship), and noncompensated employment preparation/transition alternatives (e.g., internships and practicuums, community-based volunteering, tech-prep, mentoring, and simulations/shops/labs). A synthesis of these preparation alternatives resulted in identification of six key components that are needed for successful school-to-work transition programs. These key components include coordinated, nonfragmented provision of appropriate services; strong education-business partnerships resulting in paid work experiences; relevancy in the learning process through linkage of instruction and work; early and continuing career counseling and guidance; program accountability to students and community; and a wide range of career/employment options available upon completion of transition services. Finally, four desired outcomes for participants of transition programs are described and include connecting theory with practice, developing personal and career maturity, gaining personal awareness, and attaining professional insight.

SCHOOL-TO-WORK TRANSITION: ALTERNATIVES FOR EDUCATIONAL REFORM

INTRODUCTION

Educational reform movements of the 1980s focused primarily on improving academic proficiencies of college-bound youth. Indeed, little attention was given to enhancing the school-to-work transition of noncollege-bound youth. However, more recent reports such as The Forgotten Half (William T. Grant Foundation, 1988a; 1988b) and America's Choice (Commission on the Skills of the American Workforce, 1990) stress the need to overcome the disconnection between education and work (Imel, 1991) and provide smooth, non-fragmented options for youth not pursuing a four-year college degree. The recent emphasis on school-to-work transition has been prompted by such factors as changing student and workforce demographics, the need for a more productive and competitive work force, and concern about the economic well-being of many youth (Imel, 1991).

According to the National Governors' Association, "in the past, it was possible to tolerate...a haphazard approach to school-to-work transition...[b]ut today the waste in human potential that results no longer can be afforded (p. 22)" (Imel, 1991). Programs are now needed that connect youth in school with the world of work and knowledge of themselves (William T. Grant Foundation, 1988a). Because of inadequate preparation for employment and lack of assistance in making the transition to work, many youth struggle in the labor market, are unemployed, or in jobs without opportunities for advancement.

In addition to difficulties faced by individuals, a skill-deficient young workforce hampers our nation's economic growth, productivity, and ability to compete in a global economic marketplace. Projections for slow labor force growth and increasing demands for technologically literate workers will exacerbate this problem into the next decade.

A new educational reform should be based partly on bringing school and work closer together - to enhance the workplace as a learning site, and to make school learning more relevant to the problem-solving and social skills that young adults will need on the job.

DEFINITION

The United States Department of Labor (1992) reports that the school-to-work movement has been under way for several decades, but has grown dramatically in the past 10 years. During this time, a number of competing definitions have been developed. However, Stone (1992) provides a clear and concise synopsis of the major elements of successful school-to-work transition:

> *Traditionally, successful school-to-work transition has been conceptualized as the movement between the end of formal, secondary or postsecondary education and the acquisition of an entry-level job related to the vocational program; or the continuation of job-related training and education....A modification of this definition that recognizes the increasing instability of labor markets would define successful school-to-work transition as a condition where the student can demonstrate the skills necessary for entry into a primary labor market occupation or career path consistent with his or her aspirations. (p. 7)*

The transition from school-to-work is not a single event in the lives of American youth but, rather, an extended process with several milestones. This process typically begins with odd jobs like babysitting or lawn mowing and advances to part-time paid employment in service sector jobs. "Only after finishing full-time schooling do most youth begin what they and others define as their 'first real job.' The nature of that [first] job depends heavily on their age, the level of schooling completed, and particularly on the youths' network of connections" (William T. Grant Foundation, 1988a, p. 25-26).

PERSPECTIVE

Current State of the Problem

Over the past several years, educators, politicians, and business leaders have grudgingly acknowledged the growing realization that American education does a very poor job of preparing youth to make the transition from school to employment and adult life (Grubb, 1992; Secretary's Commission on Achieving Necessary Skills, 1991; Stone, 1992; William T. Grant Foundation, 1988a). In fact, noncollege bound youth in our society receive little or no assistance in preparing for and finding employment when they complete their secondary education. Byrne, Constant, and Moore (1992) described the transition process as a "do-it-yourself" system that may affect upwards of 20 million young people who will not go directly from high school to a four-year college or university.

Stone (1992) reported that we spend five to six thousand dollars on the post-high school education of each young person who continues formal schooling, while we spend less than five hundred dollars per person on those who do not. It is somewhat surprising that we do not pay more attention to the school-to-work transition of noncollege bound youth, especially when one considers that over three-fourths of all jobs in this country do not require a college degree, but do demand specialized knowledge or skills (Burke, McKeena, & McKeen, 1991).

The lack of formalized transition systems compound problems that many noncollege bound youth face in obtaining meaningful, career-sustaining employment upon graduation. Increasingly, youth are spending "several years milling around in the workplace or sometimes at school until they are perceived as mature enough to hold down adult jobs. Age becomes a proxy for reliability" (Stone, 1992, p. 6). The result is that most *flounder* from one low-paying job to the next until their mid-20s and are never seriously trained for a career (Magaziner & Clinton, 1992). The William T. Grant Foundation (1988a) reported that:

> *For the one-half of youth who don't enroll in postsecondary education, the typical 'first real job' is almost always in the secondary labor market, one that requires few skills, offers low pay and few or no benefits, little training, slim opportunity for advancement, and little significant contact with adults. (p. 26)*

Jobs found in the secondary labor market are usually in retail, food service, clerical, and unskilled manual labor sectors. Rarely do these jobs require a high school diploma and typically do not require any training whatsoever beyond a short demonstration (Stone; William T. Grant Foundation, 1988a).

Without question, the United States devotes little assistance to noncollege-bound youths in transition from school to work (U.S. , 1991b). And, when compared with transition supports established in European and Asian countries, the United States is the worst at facilitating youths' transition from school to work (Stone, 1992). For instance, Japanese seniors typically obtain employment through well-established school-business connections and over two-thirds of German youth participate in apprenticeship programs (O'Neil, 1992). "Indeed, most young people in Europe and Asia move directly into the primary labor market by age 20 or 21, normally with a set of job skills that are in demand" (Burke et al., 1991, p. 24).

> *At the age of 16, the average German - or Austrian, or Swiss, or Danish - young person begins the transition to adulthood....At the age of 16, the average Arkansas - or New York or California - young person faces two more years of compulsory education that too often seems, and generally is, irrelevant to the world of work. (Northdruft cited in Stone, 1992, p. 1)*

Contributing Factors to Current Situation

Why does the tremendous discrepancy between foreign and domestic transition policy exist? What has caused the United States to be considered the worst country in the industrialized world at facilitating youth in their transition from school to work? Why does the U.S. lack a real structure for preparing students to transition from school to work (O'Neil, 1992)?

One reason for the recent attention on school-to-work transition is the demographic shifts occurring in both the general and school populations. Our school population contains more students with special needs than at any other time in our nation's history (Maddy-Bernstein & Rojewski, 1992). Greater numbers of immigrant, limited-English proficient, disabled, and economically disadvantaged students are a part of the American classroom. In addition, social problems including teen pregnancy, drug abuse, and latch key children are making a tremendous impact on the way we educate our children. "In short, our classrooms are increasingly being filled with the kind of kids whose problems we usually ignored in the past or who we were content to throw away" (Stone, 1992, p. 4). The additional problems encountered by this segment of our population augment the difficulties experienced in making the transition from school to work.

A number of other factors have contributed to the current situation including the perceptions of youth toward their education, program emphases made by school personnel, hiring decisions made by business and industry leaders, and the transformation of the workplace. It is interesting that until very recently schools did not feel responsible for students once they left the classroom (Byrne et al., 1992). This lack of perceived responsibility was coupled with a singular focus on college preparation. For whatever reason, secondary schools have ignored noncollege-bound youth despite the fact that less than 20 percent of high school graduates will receive a college diploma five years after their graduation.

Perhaps because of this misplaced emphasis on college preparation, many students (especially non-college bound youth) have discounted their academic high school experiences. This academic decline can be directly attributed to students' correct assessment of the lack of connectedness between the world of work and schools (Bishop, 1992). This perceived disconnectedness particularly hurts those young people that enter the labor market directly out of high school (O'Neil, 1992).

Students are not the only ones to have discounted the role that schools play in the preparation for and actual transition of youth from school to the world of work. Employers have also blamed schools for the poor academic preparation and lack of vocational training in entry-level workers. However, the blame cannot rest solely with the schools. Byrne et al. (1992) reminds us that many of these same employers have had "minimal contact with the schools and provided little in the way of structured training for the high school students or recent graduates they hired, often preferring to avoid hiring them entirely" (p. 23).

Shanker (cited in Stone, 1992) indicated that this type of circular behavior of blame and irresponsibility has resulted in two consequences:

> *Youths' negative attitudes toward work because of [their] involvement in the secondary labor market (no relationship between school and work); and, young adults remaining in the state of 'adolescent worker' until they are in their mid-twenties when they might 'settle down' and are presumed mature enough for primary labor market jobs. (p. 3)*

Repercussions of a Poor School-to-Work Transition System

Byrne et al. (1992) boldly declared that the absence of an effective school-to-work transition system to help noncollege-bound youth enter the workforce costs us dearly, both socially and economically. The national economy is damaged by our inability to take otherwise qualified young people and transition them directly to primary labor markets. Instead these young people often spend years floundering in low-skill, low-paying secondary markets. More importantly, the lives of many young people are being damaged by our collective failure to help make transition smoother. Hamilton (cited in William T. Grant Foundation, 1988a) argued that "the absence of a clear, direct path from school to work contributes to much of the problematic behavior among American youth" (p. 27).

Concerns also exist in relation to the quality of the American workforce especially in the face of toughening global competition (O'Neil, 1992). A need exists to produce qualified workers that possess increasingly sophisticated knowledge and skills (U.S. Department of Labor, 1992). According to the U.S. (1991b), "improving the quality of entry-level workers is a critical element in improving the overall quality of the national workforce if American businesses are going to compete effectively in the world market place" (p. 64926). The most effective and efficient method to alleviate these concerns lies in better quality work experience, closer integration between work experiences and schooling, and a coordinated, systematic process of transition from school to adult life and employment (William T. Grant Foundation, 1988a).

Federal Legislation: A Call for Change

Congress authorized the Carl D. Perkins Vocational and Applied Technology Education Act as amended (Perkins II) in 1990. In legislating Perkins II, members of Congress recognized that vocational and technical education have much to offer this country's effort to compete in a world economy and to prepare a world class workforce. A recurring theme and major emphasis of Perkins II, as envisioned by Congress, is the strengthening of the academic content of vocational courses and the infusion of academic curriculum with practical, work-related examples. Congress recognized that the preparation for work was moving to a new paradigm, while education was tending to remain somewhat static (Resnick, 1987). A new paradigm for education, one that lessens the distinction between the workplace and learning, was needed. Just as important, adequately prepared non-college bound youth must be provided with options for making a smooth transition from school to primary labor markets.

Changes in Perkins II provided vocational education with the impetus for assuming a leadership role in state and local efforts to provide these transition options by:

- Emphasizing the integration of academic and vocational education,
- requiring greater accountability of vocational programs,
- distinguishing between secondary and postsecondary levels of vocational/technical education,
- encouraging local districts to provide leadership in reforming and improving transition from school to work, and,

- greater emphasis on a curriculum and instruction that enhances students' thinking and problem-solving skills in graduates.

Sociological Influences

As a whole, our society has difficulty accommodating young people as they make the transition from school to work. Levitan and Gallo (1991) noted that this inadequacy is reflected in limited work training and experience at the secondary level, a disregard for developing job search skills in students, and the absence of any structured type of job placement assistance program for non-college bound youth. Both educators and employers are more interested in the "accumulation of credentials [*i.e.*, degrees, educational attainment] rather than the achievement of knowledge and skills" (p. 5). As a result, many youth flounder in the secondary labor market or face unemployment after they graduate from high school.

Young people have traditionally held jobs and occupations that pay lower wages and are, in general, less attractive to older workers (Kett, 1977). In fact, approximately 40 percent of employed youth work in the service sector (retail sales and food service), which may be classified as a secondary labor market.

> *Forty-four percent of 16-to-19 year olds are employed in retail trade, compared to less that 14 percent of workers older than 24. The category of 'service worker,' which includes low-skill jobs such as custodian, contains 25.7 percent of all employed teenagers but just 10.5 percent of workers older than 24. (Hamilton, 1990, p. 21)*

In addition to low wages, workers in the secondary labor market are not represented by worker-organized efforts to assure rights and benefits for employees (Borman, 1991).

Secondary labor market jobs are typically identified as paying minimum wages, having part-time or irregular schedules, providing limited or no opportunity for advancement, and insignificant skill development. Lee (1976) warns that workers in the secondary labor market are also at-risk of developing undesirable attitudes and values about work that may become relatively fixed and difficult to change in later years.

Borman (1991) analyzed the secondary labor market phenomenon and concluded that it served as a means "to keep youths in a holding pen and to separate them from the higher paying jobs held by those who are older but not necessarily more skilled or more capable" (p. 35). Thus, from a

sociological perspective, the many restrictions placed on working youths (*e.g.*, unnecessary requirements for work experience) may not have emerged to protect youths but as a means to protect adults from youths.

The secondary labor market has, in effect, served as a way to place 16-to-21 year old youth in "limbo" until they reach a level of maturity consider necessary for entrance into the primary labor market (Shanker, 1990). In this way, many employers have used age as a benchmark of stability and reliability among employees and have not viewed teenagers as qualified applicants for full-time ("career") positions. According to Resnick (cited in O'Neil, 1992), employers basically don't want to hire young people directly out of high school. They want to let them "ripen" a bit and hire them when they're 24 or 25. Thus, students do not make the connection between school and careers they wish to pursue. This may cause a lack of incentive to improve in school studies and a negative relationship between performance in school and career attainment.

School-to-work transition could be viewed as a bridge for youth between schooling and the beginnings of a career. And, research has demonstrated that adolescents not only value work, but would benefit from a structured system of transition. Eckstrom, Goertz, & Rock (1989) documented the five most important issues for contemporary high school seniors. They were, in order of importance, success in work, marriage and family life, strong friendships, steady work, and better opportunities for their own children. Yet, limited career counseling is provided by our educational system to support their concerns. In fact, Barton (1991) observed that nearly half of all high school students had never discussed careers or occupations with a guidance counselor.

Borman (1991) summarized several studies and concluded that the difficulties youth experience in seeking and finding work are rooted in both family and social structures. In recent years, work has largely been removed from the home resulting in a lack of awareness about the nature of work and the requirements posed by an increasingly technological workplace. The absence of a practical picture of work may pose problems for many youths in making realistic goals for a future career. However, engaging students in education, family, and work activities may facilitate realistic career goal setting (Lee, 1976).

Youth face many problems, restrictions, and adjustments in relation to entry into the work of work. In view of the limited support they receive from most employers and schools, it is important that models be formulated and implemented to assist youths in making a smooth and coordinated transition from school to primary labor markets.

Summary

Without question, special attention must be given to the forgotten half, those 50 percent of secondary students who will not continue with postsecondary education (O'Neil, 1992). The William T. Grant Foundation (1988a) provides a succinct synopsis of the preceding discussion. They observed:

> *Three statements summarize the foregoing discussion. First, most youth who do not enroll in higher education experience an extended floundering period in the secondary labor market before beginning a real career. Second, this pattern results primarily from the action of employers, from adult attitudes and expectations, and from the health of the local labor market, rather than inherent characteristics of youth. Third, this pattern is damaging to both youth and society. (p. 26)*

PEDAGOGICAL ALTERNATIVES FOR PREPARING STUDENTS TO TRANSITION FROM SCHOOL-TO-WORK

Transition for Special Populations

Demographic data suggests that the labor force is growing much slower and the pool of young workers is shrinking, requiring employers to look beyond the traditional sources for entry-level workers. The labor force of the future will be comprised of individuals that have traditionally faced the greatest barriers to full participation in the labor force including persons with disabilities or members of disadvantaged groups considered at-risk (Hodgekinson, 1985). Professionals interested in enhancing school-to-work transition for noncollege youth may do well to first examine the extensive efforts that have been expended in developing transition options for youth with disabilities.

The rapid acceptance and growth of the federal transition initiative for persons with disabilities is well established in the professional literature (Halpern, 1985; Rusch & Phelps, 1987; Wehman, Kregel, & Barcus, 1985). However, relatively little attention has been focused on providing similar types of transition services to disadvantaged students. Early attempts to identify

variables critical in successful transition focused on programs for persons with mild mental retardation. Hence, thoughts and ideas about what constitutes a good secondary program for at-risk youth involved in transition school to adult life are still evolving.

A natural evolution of thought regarding components and outcomes associated with transition programs can be identified. In the early 1980s, the U.S. Office of Special Education and Rehabilitation Services (*OSERS*) identified transition as a national priority and developed a conceptual model of the transition from school to work process (Rusch & Phelps, 1987; Will, 1985). The *OSERS* model is characterized by a solid secondary school foundation, appropriate support upon completion of school and a variety of employment options for adults. Will's model incorporated a bridging concept to illustrate the use of service methods in the transition process. Three distinct methods were identified including no special services, time-limited services, and on-going services. Regardless of the method used, the primary outcome of a planned transition sequence was clearly on employment.

Shortly after the federal transition initiative was established, researchers and practitioners began to refine and expand on the preliminary model espoused by Will. Wehman and his colleagues (1985) developed a three-stage transition model that is primarily school-based and focuses on employment as the primary outcome. The three stages of the model include *inputs and foundation* (characterized by a functional, integrated curriculum and community-based service delivery), *process* (involving the formation of a formalized transition plan through interagency cooperation and parent-student involvement), and *employment outcomes* (ranging from supported to competitive employment). While this model was originally established for individuals with severe disabilities, elements have been successfully adapted for other populations (Rojewski, 1992).

In reaction to strictly employment-oriented transition models, Halpern (1985) proposed that transition programs should incorporate other elements deemed necessary for successful community adjustment. Community adjustment is perceived to involve three separate dimensions including *employment*, the quality of one's *residential environment*, and the extent of *social and interpersonal networks*. While quality of life issues have received increased attention during the past several years,

some researchers have cautioned against over-emphasizing these issues. They recommend that the focus of secondary transition services remain on employment and that quality of life issues be addressed in the context of employment.

As evidenced from the conceptual models developed top explain transition from school to work, a single 'true' professionally accepted definition of transition does not exist. Even so, researchers (Cobb & Hasazi, 1987; Halpern, 1990; McCarty & Hess-Grabill, 1990; Wehman et al., 1985) have identified key components of successful secondary transition programs including individualized transition planning, integration within mainstreamed settings, paid work experiences, active family involvement, coordination of data and services, job-seeking and placement, and follow-up or follow-along.

Generic Transition Preparation Alternatives

A number of proven pedagogical alternatives are available to facilitate the preparation of youth for transition from school-to-work (although not all options are available in all schools or communities). These transition-preparation programs have been categorized and will be examined according to their relative position on two separate continuums - the paid or nonpaid status of work experience (preparation) and the degree of involvement school personnel have in the development and maintenance of program activities and participants (see Figure 1).

Insert Figure 1 about here

Paid Alternatives

Many work preparation programs provide students compensation in compliance with federal, state, and local laws. Such compliance ensures that students are not exploited for private gain. The compensation feature guarantees that students are paid for work performed and that they are recognized employees of the employing organization.

Apprenticeship. The apprenticeship concept is learning by doing under the sponsorship of a mentor or master craft worker. Under the current system, apprenticeship is structured on-the-job training combined with related instruction leading to certification of the attainment of journey worker

status in a skilled trade. During this training, apprentices receive compensation for their services partly in the form of wages and partly through instruction. Most apprenticeship terms range from one to five years, depending upon the trade involved. To master a particular trade requires:

- Learning all or most of the skills of that particular trade,
- being proficient in each specific skill,
- bringing each skill up to the speed and accuracy required on the job, and,
- learning to use specific skills in combination with other skills.

Privately sponsored and primarily funded from private sources, apprenticeship in the U.S. is typically concentrated in building trade occupations (*i.e.*, carpenter, bricklayer, electrician, plumber). This reflects organized labor unions' interest in apprenticeship. In addition, certain manufacturing trade occupations (*i.e.*, machinist, tool and die maker) are involved with apprenticeship. Various initiatives has been undertaken to expand apprenticeship to other occupations. Recently adopting apprenticeships as a primary training method are occupations such as computer programmers, repairers, and a variety of technicians (Stone & Wosner, 1990). The apprenticeship method of experiential learning has proven effective at all skill levels and is particularly well suited for technical training and retraining.

The apprenticeship system in the United States is a partnership of business and unions, the primary operators of programs. Apprenticeships are usually sponsored by an individual employer or a group of employers acting either unilaterally or jointly with a union (Glover, 1986). In addition, federal and state government, as well as education, play key roles in the operation of apprenticeships. On the federal level, the National Apprenticeship Act (75th Congress of the United States, Public Law 308), defines the conduct of apprenticeship programs. Somewhat surprisingly, no changes in federal legislation covering apprenticeship have been made since the late 1930s. Individual states have enacted more recent laws or guidelines concerning apprenticeships.

In the United States, enrollment in apprenticeship programs account for less than 300,000 of the total civilian labor force of 117 million and is generally not recognized as a training program for teenage youth as apprentices are 27 year old (Toch, 1991). In fact, very few high school graduates (less than two percent) enter into apprenticeship immediately after graduation. Thus, apprenticeship

in America has become primarily a program to upgrade training for adults who are already are employed and not as school-to-work transition model, as is the case in most other major industrialized nations.

Recently new initiatives have emerged to expand structured work-based programs through development and implementation of new training program models based on features of apprenticeship. Many of these initiatives are based on the German model of apprenticeship, which is considered a form of upper-secondary education. Under this model, youth between the ages of 16 to 18 can enter into apprenticeships in one of over 400 occupations which combines on-the-job training under a mentor for three or four days a week and study at a vocational school for one to two days, usually for a period of three years. Two German-based initiatives are school-to-apprenticeship and youth apprenticeship.

School-to-apprenticeship model. School-to-apprenticeship programs were initiated in the late 1970s by the U.S. Department of Labor and funded at eight demonstration sites. There are now over 400 school-to-apprenticeship programs involving approximately 3,500 students, with over half of those students placed in machine trade occupations (U.S. General Accounting Office, 1991). The purpose of the school-to-apprenticeship program is to allow high school seniors to become registered apprentices while completing their secondary school education. These programs are similar to cooperative education in that both involve formalized on-the-job training and related classroom instruction. Students in these programs enter an apprenticeship in their senior year of high school, work part-time, receive on-the-job instruction, and enter full-time apprenticeship upon graduation. As noted by Hamilton (1990) "school-based apprenticeship is a logical extension of current practices in secondary vocational education that bridge school and work" (p. 158).

Hours worked while in high school count toward the time required to complete the apprenticeship. Apprenticeships generally last two to four years after high school graduation. When the apprenticeship is completed, each participant receives a certificate that confers journeyman's status, which is recognized throughout the industry.

Due to difficulties in implementing this type of program such as resistance from the apprenticeship community, as well as legal and insurance problems for youth below age 18 in

hazardous occupations, school-to-apprenticeship programs have not flourished. But, program evaluation results have indicated that students in school-to-apprenticeship programs express satisfaction with their participation in the program as well as being more likely to continue in jobs related to their training (U.S. General Accounting Office, 1991).

Youth apprenticeship model. A new recommendation receiving consideration by many groups (*i.e.*, National Center on Education and the Economy, Council of Chief State School Officers), is that the United States adopt a modified version of the European-style apprenticeship system for acclimating young people to the labor market. As envisioned, a youth apprenticeship - American style - would be a combination of academic instruction in secondary and postsecondary schools with employment-based training for students at a level of quality sufficient to certify the ability of individuals to perform entry-level tasks in skilled occupations capably and professionally.

According to Jobs for the Future, Inc. (1991, August) youth apprenticeship programs combine at minimum the following elements:

- Work experience and guided learning opportunities for youth by employers within an industry or occupation cluster;
- Structured linkage between secondary and postsecondary components of the program leading to the high school diploma, postsecondary credential, or certification of occupational skills; and,
- Close integration of academic and vocational learning and of school and workplace experiences through planning and ongoing collaboration between school and industry personnel and innovations in curriculum and instructional strategies in the classroom and at work.

"An American-style apprenticeship system cannot be created without making substantial changes in schools, communities, and workplaces, and in their mutual relations" (Hamilton, 1990, p. 165). In this spirit, the Council of Chief State School Officers (CCSSO) recently awarded grants to ten state education agencies for the design and development of youth apprenticeships in 1991. During 1992, CCSSO will award several second-stage implementation grants to advance the implementation of youth apprenticeships. In addition, several state legislatures (*i.e.*, Georgia, Pennsylvania, Arkansas, Oregon, Wisconsin) have enacted legislation specifying school-to-employment policies including youth apprenticeships.

Cooperative education. One of the most often used programs of school supervised work experience is cooperative education (co-op). Cooperative education methodology combines classroom instruction with work experience and on-the-job training related to a student's career aspiration. At the secondary level, students usually attend classes for part of the day and work for part of the day. Postsecondary co-op, in most instances, alternates a quarter/semester of classes with a period of full-time employment.

Cooperative education, especially at the secondary level, is most commonly associated with vocational education (Cooperative Vocational Education or CVE) and as a part of a specific instructional program areas (*e.g.*, marketing education, business and office education, trade and industrial education). Conversely, cooperative education can and is used by other academic areas in public education. Heerman (cited in Stone & Wosner, 1990) distinguished two systems of cooperative education including the "vocational education model" and "general education model." As described by federal vocational education legislation:

> *Cooperative education is a program of vocational education for person who, through written cooperative arrangements between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field. These two experiences must be planned and supervised by the school and employers so that each contributes to students' education and employability. Work periods and school attendance may be scheduled on alternative half days, full days, weeks or other period of time. (U.S. 98th Congress, 1984)*

Whether used by vocational education or general education, "the intent of cooperative education is to provide students with opportunities to alternative academic studies with relevant work experiences, allowing them to apply what they have learned in the classroom to the job" (Stone & Wosner, 1990, p. 27). Cooperative education can enhance classroom instruction by providing practical work experience that is relevant to students' career goals.

Federal support of cooperative education has existed since early vocational education legislation, but is this an effective method of preparing students for the school-to-work transition? A recent report by the U.S. General Accounting Office (1991) indicated that "[h]igh quality cooperative education employs a structure that shows strong potential for improving work-force preparation and

aiding youth in the transition from school to work" (p. 26). Yet, only an estimated 3 percent of high school students are enrolled in formal combined school-work programs, such as cooperative education (William T. Grant Foundation, 1988a).

Cooperative education appears to offer a number of benefits to students, educational institutions, and employers. Stone, Stern, Hopkins, and McMillion (1989) found that students in cooperative education programs held jobs that (a) gave them opportunities to do a variety of tasks, (b) involved complex responsibilities, (c) developed social and career maturity, (d) increased academic achievement, (e) provided positive work environments, (f) enhanced cognitive development, and (g) made successful job transitions.

Benefits to educational institutions, as detailed by Stadt and Gooch (1977), Wanat and Snell (1980), and the U.S. General Accounting Office (1991) included the use of outside facilities that cannot easily be duplicated in school, interactions with college or school communities, improved student retention, and immediate feedback regarding program success. These same studies indicated that employers' benefits consisted of screened trainees, training programs with curricula geared to their specific employment area, and a motivated source of temporary or seasonal part-time employees.

Research findings on cooperative vocational education that indicate effective cooperative education programs as having the following minimum quality control factors:

- Written training agreements and plans;
- Supervision by school-based personnel [teacher-coordinators] and industry-based supervisors [training sponsors];
- Related classroom instruction and planned work activities;
- Progressive job placement [training stations]; and,
- Evaluation and follow-up activities. (Humbert & Woloszyk, 1983; Lynch, Price & Burrow, 1992; Mason, Haines, & Furtado, 1986; Stone, Stern, Hopkins, & McMillion, 1989; Stone & Hopkins, 1990; Stone & Wosner, 1990; U. S. General Accounting Office, 1991)

Use of these quality control factors can ensure that positive outcomes are realized from cooperative vocational education, yet many of these factors are not always implemented in all programs which may limit their effectiveness and promote a negative image.

School-based enterprises/Entrepreneurship. School-based enterprises are activities that engage students in providing services or producing goods for people other than the participating

students. Examples include: school stores, school restaurants, construction projects, print shops, farms, child care centers, retail and auto repair shops, production of school newspapers and yearbooks (U.S. , 1991a). In some school-based enterprises, students are paid for their services or goods, while in others, students may perform their roles as part of the educational process. Whereas these activities are common, they do not involve the majority of students and are seldom integrated into the basic structure of the education system.

Stone (1992) pointed out that some school-based enterprises may be the result of partnerships with local businesses, others may come from the instructional program and teacher, while others could be the result of schools sponsoring individual student initiative. In the case of the latter, students might take the "business" with them when they graduate. Here, the student has created their own job. There has been little consideration given to the possibility that entrepreneurship training could serve as a basis for a school-to-work transition model.

Most of the new job growth in the United States has occurred in small businesses, especially in those small businesses engaged in the service industry. According to the Naisbitt Group (1986), "the 1990s will be the decade in which entrepreneurism is recognized as the backbone of American business" (p. 2). Naisbitt further stated in his 1982 book Megatrends that "we [the United States] are shifting from a managerial society to an entrepreneurial society" (p. 149). In addition, many view small businesses as the United States' best hope of meeting international competition because they can adapt more rapidly to changes in the market place.

Entrepreneurship education teaches students to assess their own attitudes, aptitudes, and skills relative to those necessary for developing and running a business. Entrepreneurial activities, such as a student-created and managed business, introduce students to the challenges and satisfactions of operating a small business, even though many will never own their own business, a majority of students will work for a small business. In student-created enterprises, students are responsible for all aspects of the operation and management of the business and are encouraged to view their duties as an investment in learning that will pay off when they make the transition from school-to-work. In many student-created enterprises, students are paid in the form of an hourly wage for their work, a stipend, or a percentage from the profits generated from the goods or services.

Organizations such as Junior Achievement and REAL Enterprises have infused entrepreneurial concepts into the high school curriculum, but only a small segment of the student population participate in these types of activities. Vocational education, especially in the service program areas of marketing education and business and office education, have begun to instill entrepreneurship courses within their curricula to promote the establishment of small businesses by schools that are then "spun off" as independent firms in order to provide job for graduates.

Nonpaid Alternatives

Situations may exist where paid work experience programs are either not available or not appropriate for the particular student(s) involved. In these cases, preparation for the transition from school to work can also be enhanced through a variety of nonpaid work experience programs. The structure of these programs vary considerably and may include volunteering at a local community-based organization; participating in a job shadowing, mentoring, or internship experience; taking part in a formalized program that coordinates high school and community college curriculum; or enrolling in a vocational class that uses shop or lab activities to simulate work experiences. This section will examine each of these nonpaid transition preparation options.

Internships and practicuum. One method of providing pre-transition work experience to students in authentic work environments is through the use of internships or practicuums[1]. Hartley (cited in Stone & Wosner, 1990) noted that the internship method is often used in connection with academic and professional training as a means to provide first-hand work-related experience. Internships or practicuums tend to be one-time, short-term placements that are directly related to a student's academic professional goals. Internships typically occur toward the end of academic (professional) training. Students are usually not paid or are offered only small stipends. Typically, a student's participation is project-oriented and observatory in nature, with little on-going connection to school or teachers during the experience. Even so, the entire internship/practicuum process in institutionally structured and closely monitored.

[1]Stone and Wosner (1990) indicate that the terms internship and practicuum are often used interchangeably by professionals to describe this type of work-based experience. The authors maintain this classification protocol for the present discussion.

Thus, while students involved in programs like cooperative vocational education have very close ties to the school and participate in on-going classroom instruction, interns typically do not. Participants in internship or practicuum experiences are not paid while involved in the program. In contrast, participants in cooperative education programs are actually employed and paid by a community business. In some ways, the internship or practicuum experience may be likened to early stages of an apprenticeship-style training program where job shadowing and an emphasis on learning new knowledge and skills are of primary concern.

The primary purpose of internship/practicuum programs is to provide broad career awareness and a general orientation to work as opposed to specific career preparation. Past studies on internship programs have suggested that they provide opportunities to practice skills and apply theory learned in the classroom to actual work situations; learn and develop new skills; acquire firsthand, professional experience prior to graduation; develop positive work habits and attitudes; and test aptitudes for select areas of employment (Stone & Wosner, 1990; William T. Grant Foundation, 1988a). Despite these positive findings, the William T. Grant Foundation (1988a) warns that "internship programs are too often thought of a low budget add-ons to conventional schooling rather than as programs that need and deserve resources equivalent to those devoted to traditional classroom instruction" (p. 43).

While a number of components have been identified in the literature, two components appear to be key to successful internship/practicuum programs. First, one key to success is the duration of the internship experience. Programs that provide a practicuum of relatively long duration (*e.g.*, lasting a full semester) have been found to be stronger than ones with shorter term experiences. Secondly, the intensity of work experiences have been consistently related to positive student involvement. Specifically, programs that placed students in internships that lasted 4 or more hours per day were consistently related to positive student change (Conrad & Hedin cited in Stone & Wosner, 1990).

Other programs have added unique features that may be considered exemplary. These exemplary features should be carefully considered when developing internship or practicuum experiences for students. These key components include:

- Careful attention to pairing interns and professionals,
- periodic, full-day seminars where interns discuss work-related experiences and work on academic projects related to their internships,
- career counseling and support services to students as they make the actual transition from school to employment or postsecondary education/training,
- follow-along services for a period of six months to a year following graduation from high school. (William T. Grant Foundation, 1988a)

Community-based volunteering. Limited attention has been given to the idea of using voluntarism as a means to prepare youth for the transition from school-to-work. Individual voluntary service involves unpaid community service as a way to complement paid work or cooperative education experiences. "The philosophical rationale for service is that young people need experience not only as workers but especially as citizens" (William T. Grant Foundation, 1988a, p. 48).

> *In most familiar forms of voluntary service, the young person works in a service agency operated by adults....Except that the work force is a form of service and undertaken voluntarily, it resembles internships and cooperative education. It has many of the same advantages with the added benefit of instilling community to voluntary service. Moreover, most community service placements promote generic employability skills, e.g., punctuality, team work, following directions, accepting responsibility, exercising initiative, etc. Thus, community service trains both for work and for effective citizenship. (William T. Grant Foundation, 1988a, p. 49)*

Another method of using voluntarism that helps to break down school-community-workplace barriers is to bring volunteers from the community into the schools. "While tutoring is the most common form of school volunteer activity, adults are needed even more generally" (William T. Grant Foundation, 1988a, p. 56).

Technical preparation (tech-prep or "2+2"). School-to-work models known as tech-prep programs have only recently been advanced as viable program alternatives to assist young people in the transition from high school to employment. Tech-prep, also referred to as the *Work-Based 2+2 concept*, is supported by the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 as amended (Perkins II). With this piece of federal legislation, Congress acknowledged the concerns about educating a workforce for the 21st century capable of meeting the demands of a global economy. The answer to their concerns was designed as tech-prep (short for technical preparation).

Tech-prep embodies the ideal of a comprehensive technology-based curriculum that is mutually developed and articulated between secondary and postsecondary educational institutions. Curriculum can be based on health, technology, or related types of vocational emphases. However, the common element of these varied curricula is the existence of a 4-year program designed to culminate in a high school diploma upon completion of the first half of the program and to a two-year associate degree or certification on completion of the second half of the program (U.S. Department of Labor, 1992). As originally envisioned, successful tech-prep programs require systematically developed, comprehensive links between secondary schools and postsecondary institutions. Typically, tech-prep programs include structured work-site experiences that progressively increase from half-time in high school to nearly full-time at the community college level.

Tech-prep is not a new idea; articulation programs between high schools and postsecondary technical institutions have long been a feature of some effective vocational education programs in some states. The writings of Parnell (1985), however, perhaps brought to national attention the significance of connecting secondary and postsecondary curricula as an alternative to the college-prep program. Hull and Parnell (1991) further described tech-prep as "a carefully designed curriculum that engages a high-school student in a four-year (2+2) or six year (4+2) plan to gain the competencies (knowledge, skills, and values) required for technical careers" (p. 46).

Tech-prep "Associate Degree" programs consist of a coordinated curriculum for grades 11-14 that parallel a more traditional four-year baccalaureate degree program. This approach offers tremendous potential for educating workers for a technological society. Tech-prep programs are envisioned as a formal, logical sequence for students to transition from school to work and to acquire both academic and occupational skills. In addition, tech-prep is viewed by educators and business leaders as a means to create the well-qualified workforce required by the United States for international competition.

The Tech-Prep Education Program section of Perkins II legislation supports the development and operation of articulated 2+2 programs. In addition, the legislation provides clear direction for those wanting to develop tech-prep programs. Perkins II outlines a common core curriculum of mathematics, sciences, communications, and technologies; requires learning outcomes that should be

achieved using applied academics and an appropriate sequence of courses; states that the program must culminate in an associate degree or certificate in a specific career area; stipulates in-service training for counselors and teachers; and ensures equal access to members of special populations.

Mentoring. The very concept of mentoring dates back to early civilization and, in recent years, has become a powerful tradition for preparing high school students for the transition from school to employment (Backes, 1992). The William T. Grant Foundation (1988a) observed that successful school-to-work transition programs often use a mentor approach as a key part of a broad range of work experiences provided.

"Mentoring generally refers to an older more experienced person helping a younger one in a one-to-one relationship that goes beyond the formal obligations of a teaching or supervisory role" (William T. Grant Foundation, 1988b, p. 169). In a role of confidant, mentors can help students cope with everyday problems and hardships (Wircenski, 1991). Mentors can also offer individualized instruction, career information and exploration, and advice to help young people plan their careers and succeed in school (Backes, 1992; Burke et al., 1991; Grubb, 1992). This is most successful when accomplished in a nonjudgmental, accepting manner.

Mentors may also serve as role models, however, a clear distinction should be made between role models and mentors. A mentor is usually someone who lends guidance and support that enables the young person to become whoever they choose to be. This differs from a role model where the underlying expectations are that the young person will emulate or become like the model (William T. Grant Foundation, 1988a).

Mentoring programs are designed and administered in a variety of ways ranging from informal to highly structured programs. Some programs are administered by school personnel as elective courses that provide release time from school so that students might regularly interact with their mentors. Others are spearheaded by local businesses who may provide speakers to work preparation classes, give tours of their facilities, or offer summer internships to deserving students. Regardless of the specific structure, the most successful programs are those that provide long-term and continuous relationships for students. The William T. Grant Foundation (1988b) asserts that

"mentoring entails at a minimum a year-long commitment if the new relationship is to provide substantial help" (p. 170).

Backes (1992) described a program where mentor-protege matches where made based on similar interests of the two participants. This interest was then used to structure activities that allowed a mutually beneficial relationship to develop.

> *Each unique mentorship experience is centered around a student's self-selected, semi-independent project, which involves opportunities for students to observe and work directly with their mentors. A weekly seminar allows students to develop critical thinking skills, share their work in progress with peers, and interact. (p. 222)*

The match between mentor-protege is a critical factor in the eventual success or failure of this transition preparation experience. The William T. Grant Foundation (1988b) believed that success depended on the "right blend of personalities, temperaments, and expectations - a subtle chemistry that is hard to predict" (p. 171-172). Indeed, compatibility of personalities and shared interests are crucial to the mentor relationship. Without these attributes, individuals involved in a mentoring relationship will not develop care and trust for one another, the cornerstones of good mentoring.

Mentor programs may be especially applicable to student with special needs (*i.e.*, economically disadvantaged or otherwise at-risk youth).

> *Good mentoring programs take special pains to involve the neediest youth. The ones who could most benefit from a mentoring relationship are often those with such a limited vision of their own future that they are not likely to see the advantages such as relationship would offer them. (p. 170-171)*

Professionals who develop mentoring programs must be cognizant of this fact and strive to involve all students who might benefit from this type of involvement.

Recent popular and academic literature have drawn attention to the benefits that mentoring relationships can offer to proteges and mentors. Burke et al. (1991) conducted a study that compared mentor relationships with typical supervisory relationships. They concluded:

> *Proteges were rated more promotable, tended to be more similar, in longer relationships, and hired and placed by managers but were communicated with less frequently and tended to be physically further away from managers than were typical subordinates. Managers reported*

providing significantly more psychosocial functions, but not more career development functions, to proteges than to typical subordinates. (p. 459)

Above the career-related benefits of mentoring relationship, Burke et al. (1991) asserted that the real significance of the mentor/mentee relationships is the exchange of values and attitudes. Mentoring can "build skills that increase self-esteem and show young people that caring adults think they are worthwhile, important, and can make a difference in the world" (William T. Grant Foundation, 1988b, p. 172).

Backes (1992) summarized the benefits of mentoring relationships as follows:

- Mentorship offers career exploration opportunities to experiment and learn first-hand from professionals about their chosen occupation,
- mentorship programs are inexpensive (all mentors are volunteers),
- mentorship immerses the student in the higher-order thought processes of the professional. In addition, students develop more motivation and find more meaning in their learning than students engaged in isolated fact-recall in classroom settings, and,
- it is in the relationship between content and context that a mentor can make the greatest contribution to student learning. (p. 222)

Simulation, shops, labs. Simulations, shops, or laboratories constitute another alternative to prepare youth for the transition from school to work. In all three instances, educators attempt to approximate authentic activity in classrooms or other non-work environments that will "comprise a more or less accurate representation or model of some external reality" (Stone & Wosner, 1990, p. 37). Nystrom, Bayne, & McClellan (1977) observed that simulation is the process of "establishing a model of a physical or social system. Reality is replicated to the degree that the simulation designer is able to select the essential elements from the physical or social environment" (p. 151). To prepare students for transition from school-to-work, Parry (1980) concluded that "we [should] create situations that simulate the problems, constraints, and resources of the everyday work environment. We then place learners in the midst of the maze and ask them to find their way to the goal" (p. 99).

Vocational education and preparation programs rely, to one degree or another, on the use simulations, shops, and laboratories. And, Parry (1980) concluded that they have proven to have a high-impact on developing new behaviors in students. Yet, not everyone agrees with this assessment. Stone (1992) stated that although simulations "are commonly used in vocational education, they are

arguably the least effective form of pedagogy for facilitating school-to-work transition" (p. 15). One reason Stone makes this assertion is that education options using authentic, actual work environments in the educational process are considered superior to simulated ones (Brown, Collins, & Duguid, 1989; Collins, Hawkins, & Carver, 1991).

When simulations, shops, or labs are included in the educational process they usually serve to provide opportunities for students to practice and apply previously acquired knowledge and skills. Parry (1980) claimed that the use of simulations enabled learners to sharpen their analytical thinking skills, develop insight and sensitivity, and acquire an ability to handle people and tasks.

Stone and Wosner (1990) outlined several variations that could be used to structure simulations and laboratory experiences:

- *Case Study.* An oral or written account of an event, incident, or situation used to develop critical thinking skills or gain new perceptions into concepts and issues.
- *Computer Assisted Instruction (CAI).* Highly structured and self-paced series of learning segments presented by computer that also process response information and provide immediate feedback.
- *Role Play.* Interaction between two or more people on a given topic or situation that assists in identification of problems of social interaction.
- *In-basket Practices.* Simulated, reinforced exercise where learners respond to a collection of memos, directives, and problems that force them to prioritized, make decisions, and handle difficulties that might be found on the job. (p. 37)

Other Alternatives

While the educational programs described in the previous two sections constitute the major pedagogical alternatives available to prepare students for employment and adult life, there are other programs or instructional components that can be used to help youth prepare for the transition from school to primary labor markets. Several of these are briefly described below. As these are reviewed, it is important to remember "the challenge at hand is not the creation of new programs, but the wider, more coordinated implementation of the many successful practices that already exist in schools and communities throughout the country" (William T. Grant Foundation, 1988a, p. 30).

- *Business-education partnerships.* Some experts advocate the development of partnerships between secondary school, postsecondary institutions, and businesses to eliminate the fragmented nature of existing school-to-work transition efforts (O'Neil, 1992). Many of the

instructional alternatives discussed earlier contain some variation of education-business partnerships in their designs, but most do not include the development of strong education-business coalitions where businesses agree to provide jobs to program graduates if schools agree to enhance the relevancy of their programs and raise students' academic success (Byrne et al., 1992). These type of formal agreements are needed to facilitate youths' transition to the workplace.

- *Work-site model.* The work-site model takes students out of the traditional school environment where they may not be motivated to succeed and places them in a specialized industry-based school located at a work site. Students are paid for work-site learning and receive a work-based learning curriculum that is hands-on and competency-based (U.S. Department of Labor, 1992).
- *Experience-based career education (EBCE).* While originally designed to provide career exploration and work experience in authentic environments, *EBCE* has been used as a means of teaching a variety of knowledge and skills. "Consistent with the purpose of explol education. "Attempts to integrate vocational and academic education - through academies, occupationally focused schools, and occupational clusters, for example - take seriously the vocational purpose of high schools and may remedy some chronic problems" (Grubb, 1992, p. 36).

DISCUSSION

Key Components of Successful School-to-Work Transition Programs

Most of the professional literature on school-to-work transition (excluding work on individuals with disabilities) describes one or more of the various pedagogical alternatives available for *preparing* students to transition from school to work, yet, very few discuss the actual process of transition itself (*i.e.*, crossing the bridge from secondary or postsecondary education to employment). The variety of programs and services provided to students are, of course, critical to the success of any transition process. It is equally important, however, that educators and businesses alike begin to examine and place more emphasis on the actual transition process. These authors would assert that it is important to provide youth with support and assistance during the actual process of transition, in addition to the preparation phase.

It appears that young people have four distinct options available to them as them think about how they will make the transition from adolescence to employment and adult life including a direct path from high school to employment, high school to postsecondary education, postsecondary education to employment, or high school to postsecondary education to employment. The various paid and nonpaid pedagogical alternatives (discussed previously) can be identified with one or more of these main transition paths (see Figure 2).

Insert Figure 2 about here

Regardless of the specific path chosen, each school-to-work transition program should contain several key components that distinguish it as comprehensive, quality programming for assisting youths' progress from their educational experiences to primary labor markets that match their career interests. These key components include:

- Coordinated, nonfragmented provision of appropriate services,
- strong education-business partnerships resulting in paid work experiences,
- relevancy in the learning process through linkage of instruction and work,
- early and continuing career counseling and guidance,
- program accountability to students and community, and,
- a wide range of career/employment options available upon completion of transition services.

Coordinated, Nonfragmented Services

Uncoordinated or fragmented service delivery associated with transition programs lessens the effectiveness of services provided. Unfortunately, this is the current situation for many school-to-work transition programs. O'Neil (1992) writes that many of the pieces are in place but they do not provide youth with a smooth and systematic process of going from secondary or postsecondary education to employment. Therefore, the goal for school-to-work transition programs must include providing services that are both coordinated and continuous.

Education-Business Partnerships

Efforts to develop comprehensive, relevant, and integrated school-to-work programs and services requires close cooperation between educators and employers (Byrne et al., 1992; Stone,

1992; U.S. , 1991b; William T. Grant Foundation, 1988a). Imel (1991) explained that effective partnerships share the following six common elements.

> Effective partnerships utilize a *broker or intermediary* to facilitate cross-sector collaboration and governance. Brokers can "help translate differences in terminology, context, and cultures and help create a sense of common ownership" (p. 2).
>
> Professionals must ensure that programs *involve the right players* in the development and implementation process. High-level leaders who share a common mission must agree to share risks and benefits equally.
>
> *Commitment* from all partners is critical. "The commitment must be long term, sustained, and emerge from all sectors involved in the partnership" (p. 2).
>
> *Formal plans* must be developed to guide program development and evaluation. Plans include short- and long-term goals, measurable objectives, and specific tasks. It is also important that responsible individuals and due dates are included to ensue accountability to the program.
>
> Management and *implementation of the plan* is also an important component that must not be overlooked. This component will also help to *maintain the partnerships* that have been formed and may also help to form new alliances as the program evolves and matures.

Linkage of Instruction and Work

Most agree that school-to-work programs should lead to initial employment and a significant chance for continued employment and educational growth (U.S. , 1991b). In order to adequately prepare youth for employment, transition programs must be able to incorporate academic and vocational education with actual work experiences and training activities. "A guiding principle for successful school-to-work partnerships is that the more teachers can link their lessons and materials to actual work-site experiences, the more likely it is that programs will be successful" (U.S. Department of Labor, 1992, p. 9). Real work experiences must be used to develop occupation-related skills and behaviors and advance the use of basic skills (Stone, 1992).

> *In an integrated framework for school-to-work transition, the system would not only institute new and effective ways of learning, but it would also link the many individual programs to provide a complete range of education and training for every student. Under this new system:*
>
> - *All students' education is comprehensive;*
> - *All students have focused curriculums from 9th grade on, but are free to move among curriculum options based on performance and desire;*
> - *Structured on-the-job learning is linked to academic learning;*

- *All learning is performance drive; all evaluation is outcome-based; and,*
- *Structured on-the-job learning is based on performance analysis of critical competencies along a defined career path. (Byrne et al., 1992, p. 25)*

Career Counseling and Guidance

Adolescents must be provided career guidance and counseling early in the education process and continuing until the transition process has been completed. Stone (1992) warns, however, that we cannot be satisfied with the types of services typically provided by career and guidance counselors. "The fact is, most school guidance counselors have advice loads of 300 or more students and do little more than take care of problems and find college application forms for requesting students" (p. 5). A variety of career awareness and exploration activities must be provided to all youth in a systematic and coordinated fashion. Further, the results of vocational assessment activities must be explained to students and used to select appropriate curriculum and career options.

Program Accountability

Another key component of transition programs is the issue of accountability. One way to instill program accountability is by brokering formal agreements between education and businesses. Formal agreements that state specific objectives and specify persons responsible for successful completion of these objectives are one way to build accountability into the system.

Evaluation is key to successful programs and can be used to enhance accountability. Stone and Wosner (1990) described three separate evaluation areas including inputs, transformation, and outputs (outcomes). Input evaluation focuses on available resources and ways that strategies and decisions are made. Transformation is concerned with the quality of instruction and overall operation of the transition program. Outputs center on valuative components of student and program benefits.

Wide Range of Employment Options

Finally, but perhaps most important, program developers and administrators must ensure that program graduates have a wide range of meaningful, primary job options upon exit from the educational system (U.S. , 1991b). Incentives might take the form of guaranteed postsecondary and continuing education, guaranteed jobs, or guaranteed job training (William T. Grant Foundation, 1988a). One aspect that secondary and postsecondary school officials must careful consider is the

provision of job placement services for noncollege youth (Stone, 1992). This role is quite different from the one that schools currently play for noncollege bound youth in this nation.

Desired Student Outcomes

A school to work transition model should be wholly integrated with classroom learning environments rather than being an "add-on," or an elective option for students. The major goals of a school to work transition model should be to encourage genuine learning and expand student capabilities for sustained and successful careers of their choice. All students need a personal plan to accomplish goals that will lead them to a fulfilling life as a contributing member of society.

Among desired student outcomes for any school to work transition model include the following:

- *Connecting theory with practice.* School-to-work transition models afford opportunities for students to apply classroom learning in real-life (authentic) situations. Here, classroom knowledge and facts are specifically related to situations and experiences that have real significance for students. In this manner, opportunities are also available to develop critical thinking skills in authentic work environments.
- *Developing personal and career maturity.* A wide range of personal and social skills can be acquired by students participating in school to work transition models including self-esteem, confidence, ability to cooperate and communicate with others, and a consideration of others in the workplace.
- *Gaining personal awareness.* Students can gain work-specific knowledge and experience (*e.g.*, knowledge and skills, experience with special problems) pertaining to select organizations or businesses of interest. An opportunity is provided in school-to-work transition models for students to assess their own abilities, aptitudes, attitudes and employment potential, as well as making more informed choices of available opportunities after graduation.
- *Attaining professional insight.* Students can make potentially valuable business contacts, apply their classroom learning, as well as encounter role conflicts and work-related stresses or strains which the work process entails. These experiences should also enable students to view work structures as a whole; as an arrangement operating through interrelationships.

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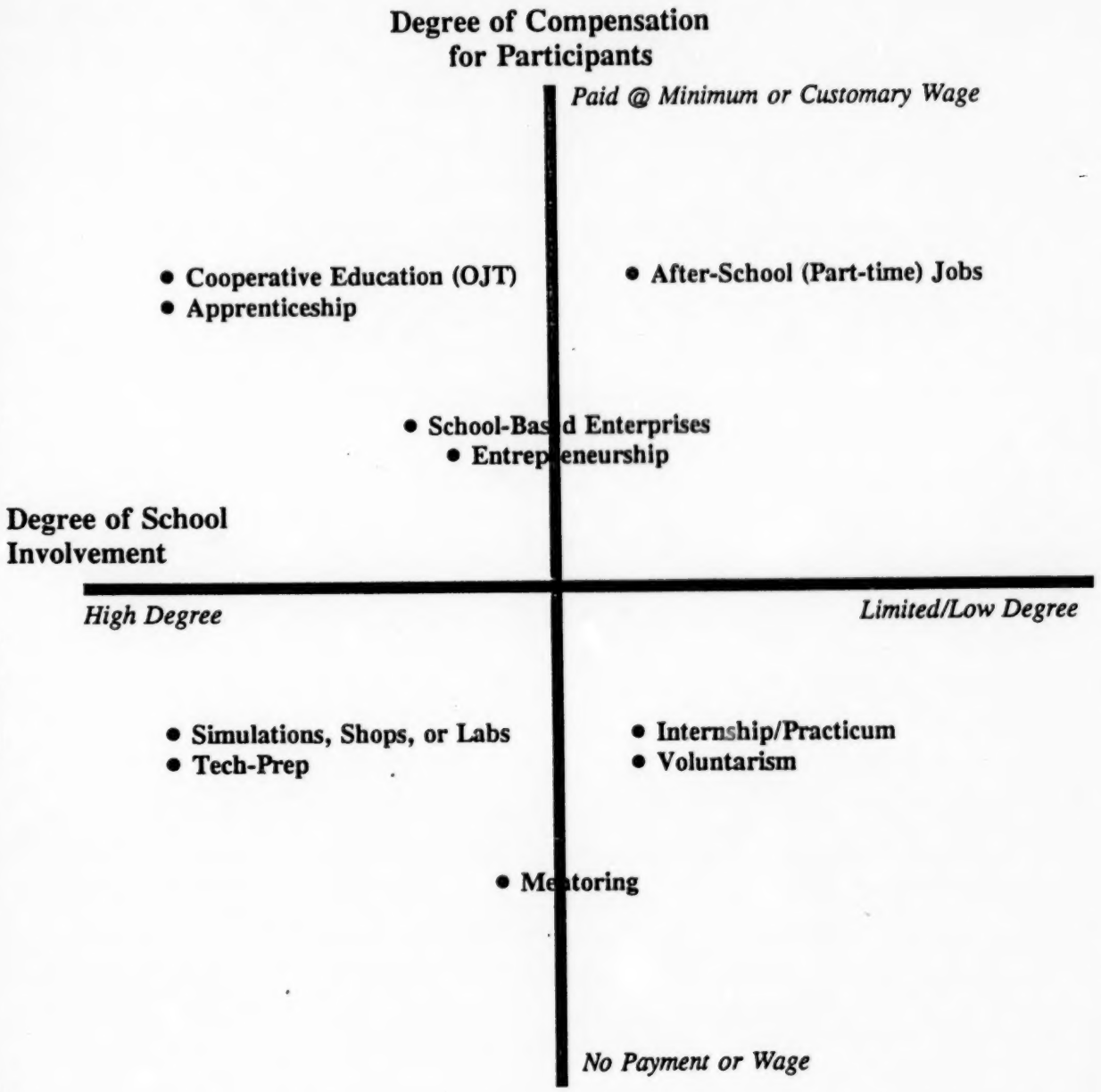
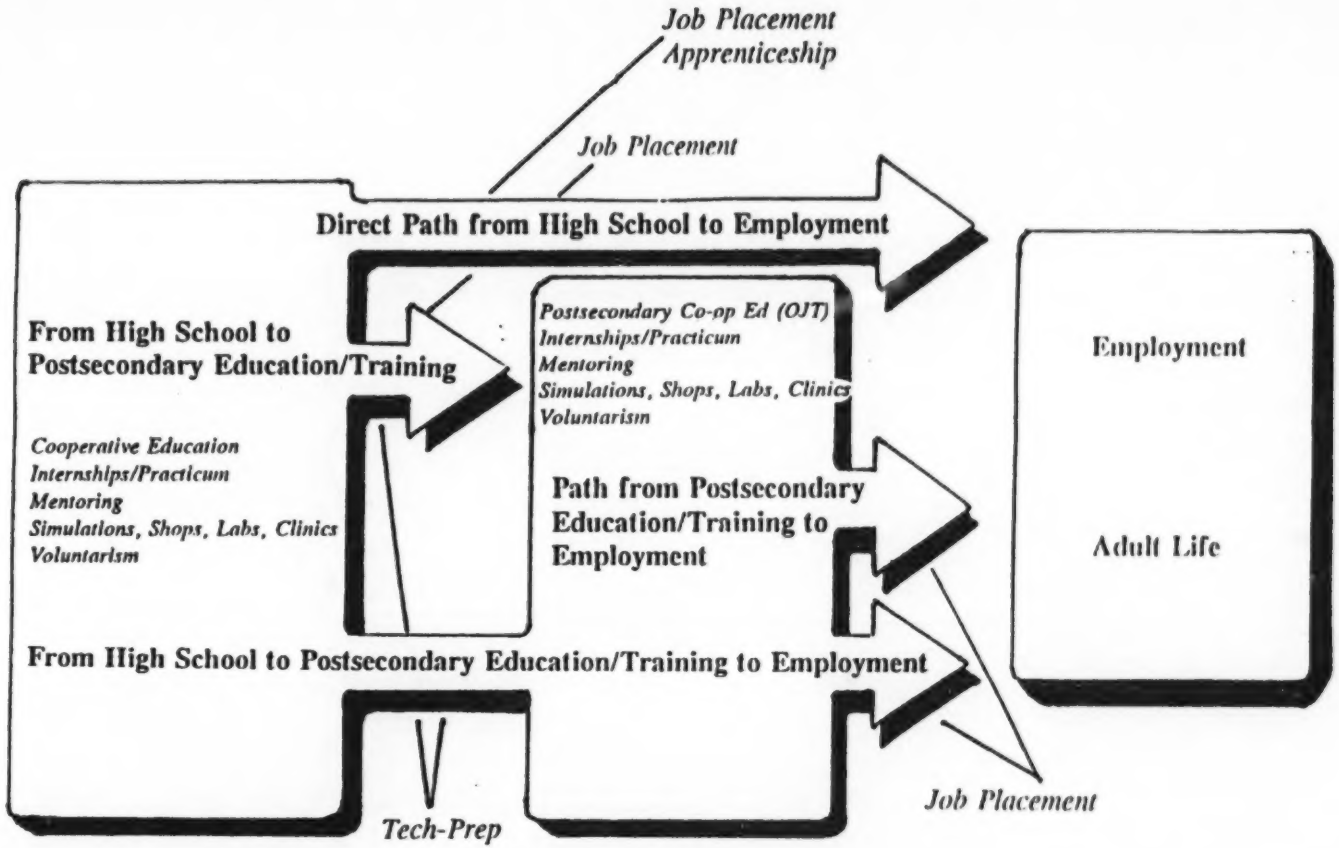

Degree of Compensation for Participants
Paid @ Minimum or Customary Wage
• Cooperative Education (OJT)
• Apprenticeship
• After-School (Part-time) Jobs
• School-Based Enterprises
• Entrepreneurship
Degree of School Involvement
High Degree
Limited/Low Degree
• Simulations, Shops, or Labs
• Tech-Prep
• Internship/Practicum
• Voluntarism
• Mentoring
No Payment or Wage



*Note. This model is adapted from a description of school-to-work transition options for youth with learning disabilities described by Rojewski (1992).